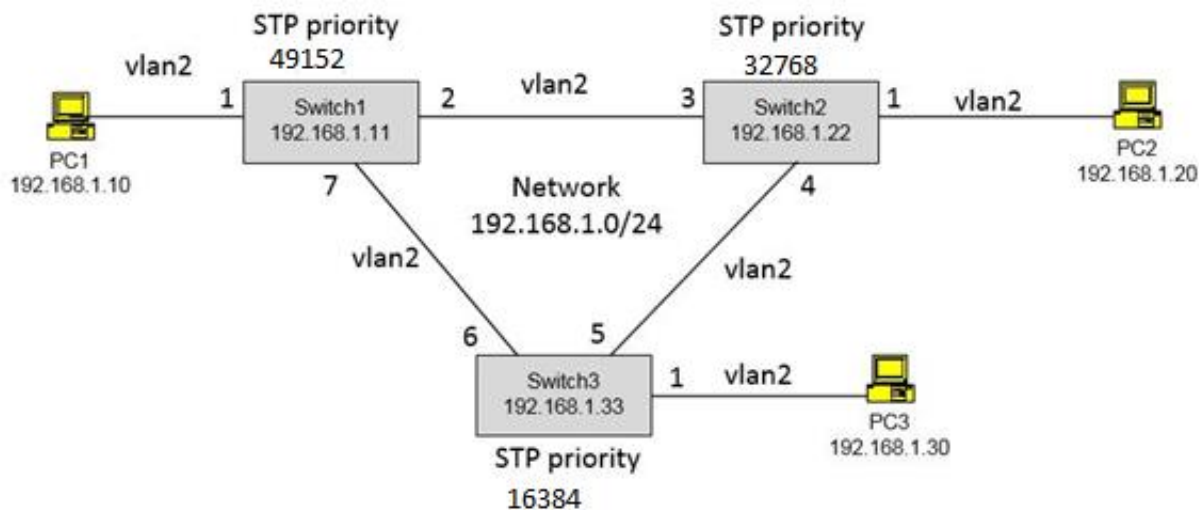


CS4471 Lab Assignment 6

Spanning Tree Protocol (version 1.0)

Use Cisco Packet Tracer program to create the network shown below containing 3 interconnected Ethernet switches and 3 computers.

- configure the hostnames as shown for all six devices
- configure each switch port shown to be in vlan 2
- configure IP address and subnet mask of all six devices as shown
- interconnect the six devices with appropriate Ethernet cables and verify that all six links are up
- verify that from PC1, you can ping the IP address of the other five devices
- configure spanning-tree priority of each switch with values shown.



1. (20 pts) submit screenshot of Cisco Packet Tracer network diagram created. Make sure that the port labels are shown (Options->Preferences->Show Port Labels)
2. (30 pts) submit printout of output of "show running-config" of each switch
3. (50 pts)
 - a. which switch is the root bridge and which switch ports will become a Spanning-Tree Protocol root port?
 - b. which switch port(s) will Spanning-Tree Protocol place into forwarding state?
 - c. which switch ports(s) will Spanning-Tree Protocol place into blocking state?
 - d. If PC1 were to send ICMP ping packets to PC2, which network links will the packets traverse?
 - e. what will happen to the port originally in STP blocking state when a STP root port is administratively shutdown ?